

**INVENTORY JOB SHEET
FOR
COMPREHENSIVE NUTRIENT MANAGEMENT PLANS**

Complete the NE-CPA-73 in its entirety and/or attach pertinent information from Client or TSP. Examples of pertinent TSP information include: construction approval application/design packets; animal inventories; waste storage inventories; Nutrient Management Plans; engineering design / layout and estimated quantities for storage facilities; and other pertinent information. Sections that are not applicable shall have an N/A placed in that section.

SECTION 1 – Client Information & Objectives

A. Name, Address & Livestock Operation Location

Owners Name: _____ Date: _____

Address: _____
Street/RR/P.O. Box / City / State / Zip Code

Business Telephone # _____ Business Cell # _____

Operator/Manager Name & Phone # (optional): _____

Livestock Operation Name (If different than above): _____

Address: _____
Street/RR/P.O. Box / City / State / Zip Code

Legal Description of Operation: _____ County: _____
Qtr. Qtr. Section – Township – Range (E or W)

Directions from Nearest Town to Livestock Operation: _____

B. Client's Objectives: _____

C. Additional Information

- 1) ☐ Yes or ☐ No - Is an expansion of the current livestock numbers expected?
- 2) ☐ Yes or ☐ No - Does the existing livestock operation have existing manure and waste water storage facility?
 - a) If YES, complete Section 3 of this document.
 - b) If YES, are the existing manure & waste water storage facilities state permitted? ☐ No ☐ Yes
 - c) If NO, are there any design plans, as-built plans & year constructed info available? ☐ No ☐ Yes
- 3) ☐ Yes or ☐ No - Has NDEQ completed an inspection of the operation? If YES, attach a copy of the letter
- 4) ☐ Yes or ☐ No - Is the Client already working with a Private Consultant on an NDEQ Application?
- 5) ☐ Yes or ☐ No - Does the Client sell or give away any of the manure generated by this operation?
 - a) If YES, complete Section 4, Table D - Manure Sold or Transferred.
- 6) What is the Mortality Plan for the dead animals? (Render, burial, incinerate, compost, etc.) _____

- 7) Include in an aerial photo with the location of the fuel tanks, chemicals and mixing area.

SECTION 2 - Livestock Information

A. Animal Numbers Fed (One Time Maximum Capacity) – Please Include All Existing & Proposed Livestock in the Operation

Livestock Type	Livestock Capacity Information							Livestock Weight		
	Head No.	Existing or Proposed?	Head No.	Existing or Proposed?	Head No.	Existing or Proposed?	Total Head Numbers	Start Weight (lb.)	Stop Weight (lb.)	Average Weight (lb.)
<i>Example: Feeder Cattle</i>	<i>1000</i>	<i>E</i>	<i>2500</i>	<i>P</i>	<i>NA</i>		<i>3500</i>	<i>700</i>	<i>1100</i>	<i>900</i>
Feeder Cattle										
Cows										
Bulls										
Nursery Pigs										
Growers										
Finishing Swine										
Sows/Litters										
Gestating Sows										
Boars										
Dairy Cows										
Dairy Heifers										
Dry Cows										
Bulls										
Calves										
Laying Hens										
Broilers										
Turkeys										

SECTION 3 - Existing Manure & Waste Water Handling / Storage Facility Information

B. Manure & Waste Water Storage Facility Description (Complete only the tables that apply to the operation)

Table 1 - Confinement Buildings

Number & ¹ Type of Animals	Flush Water (gal/d)	Underfloor Deep Pits		Underfloor Shallow Pit		Manure Storage Facility (Outside Pits & Lagoons)			
		Dimensions	Capacity (ft ³)	Dimensions	Capacity	² Type	Dimensions	⁴ Capacity (ft ³)	³ Management

➔ Does the Client use pit water (or recycle water) to flush the underfloor pits? ☐ NO or ☐ Yes

Table 2 - Dairy Operation (Confinement with or without Open Lots)

Number & ¹ Type of Animals	Drainage Area (ac)		Flush Water (gal/d)	Solid Separators / Debris Basins			Manure Storage Facilities			
	Foreign Drainage	Open Lots		Type	No.	Dimensions	² Type	Dimensions	⁴ Capacity (ft ³)	³ Management

➔ List the Type of Bedding _____ If the operation has a solid separator, does the operation recycle / reuse the bedding? ☐ Yes or ☐ No

Table 3 – Open Lots

Number & ¹ Type of Animals	Drainage Area (ac)		Debris Basin		Manure Storage Facilities (Holding Ponds)			
	Foreign Drainage	Open Lots	No.	Dimensions	² Type	Dimensions	⁴ Capacity (ft ³)	³ Management

➔ Does the Client have overflow water tanks?? ☐ NO or ☐ YES

➔ Does the Client use sprinklers to wet the pens in the summer?? ☐ NO or ☐ YES

¹Type of Animals – FC = Feeder Cattle; SW = swine > 55 lb; WP = swine < 55 lb; DC = Dairy Cattle; CH= Chickens; T= Turkeys, H= Horses

²Type of Manure Storage – Includes, but not limited to Earthen or Synthetic-Lined Pits, Holding Ponds & Lagoons: Concrete Tanks – Circular & Rectangular, etc.

³Management – Brief description of length of storage; emptying time of year, etc.

⁴Capacity Formulas

Circular Structure:

Volume = 3.14 x Diameter² x Depth ÷ 4

Rectangular Structure

Volume = Length x Width x Depth

Earthen Structure with Sloping Sidewalls and Rectangular Top.

The following is an approximation that underestimates volume by about 2 to 3%

Volume = Depth x (Top Length – (End Wall Slope* x Depth) x (Top Width – (Side Wall Slope* x Depth))

*For wall slope, use Run: Rise ratio. For wall slope of 3:1, enter slope of 3.

C. Sketch below or attach layout with approximate locations of:

- 1) Existing & Proposed Operation -Pens & Buildings
- 2) Manure Storage - Manure & Waste Water handling/storage Facilities, Debris Basins
- 3) Transfer Components - Piping, Pumps, etc.
- 4) Physical Land Features - Clean Water Diversions, Drainage Patterns
- 5) Water Well Location – Domestic & Human Consumption



SECTION 4 – Land Application Sites and Nutrient Management Information

A. Maps & Inventory Information of Application Areas Assembled by NRCS with the help of the client

- 1) Obtain from the Client 156-EZ forms and FSA-578 forms for all land owned/operated.
 - Include rented acres and acres associated with any existing manure application agreements.
- 2) Identify Sensitive Areas on maps
 - Sandy soils,
 - Streams, lakes, frequently flooded sites, wetlands, drainage courses, etc.;
 - Ephemeral & gully erosion areas,
- 3) Identify Soils & Site Information on maps
 - Soils and slopes
- 4) Identify All Existing Land Treatment Practices and needs on maps
 - Grass Filter Strips (note width), sediment basin, buffers, waterways, and terraces, other erosion control measures.
- 5) Identify Location of Manure Application on maps.
- 6) Identify Irrigation Information on maps to include:
 - Location of Wells and GPM
 - Crop Row Direction (esp. on Gravity Flow Irrigation Systems)

B. Land Available for Manure Application – Group all Tracts/Fields with the Same Crop Rotation & Field Operations.

Table 1 – Application Site Information – For Each Application Site Provide Crop History including Acres, Yields, and Fertilizer & Manure Application Information

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Legal Description of Application Site (Qtr, Qtr, S-T-R, County)	Tract(s) & Field(s)	Spreadable Acres	Land Possession	Date of last soil test	Indicate if field is Irrigated, If yes - list method & amount	Current Crop (for 20_____)						Previous Crop (for 20_____)					
						Current Crop Grown	¹ Yield - Proven or County Ave.	Type of Fertilizer / Manure	Timing & Method of Application	Total (Ave.) lb/Acre Applied		Previous Crop Grown	¹ Yield - Proven or County Ave.	Type of Fertilizer / Manure	Timing & Method of Application	Total (Ave.) lb/Acre Applied _	
										Nitrogen (N)	Phosphorus (P ₂ O ₅)					Nitrogen (N)	Phosphorus (P ₂ O ₅)
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
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			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												

➔¹Yield (Columns 8 & 14) –
☐ YES, client has proven yields / certified crop insurance records for last 5 years. Obtain copy certification (i.e. crop insurance records).
☐ NO, client does not have proven yields / certified crop insurance records. Use County averages for Nutrient Management Plan.

Continued Table 1 – Application Site Information - For Each Application Site Provide Crop History including Acres, Yields, and Fertilizer & Manure Application Information

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Legal Description of Application Site (Qtr, Qtr, S-T-R, County)	Tract(s) & Field(s)	Spreadable Acres	Land Possession	Date of last soil test	Indicate if field is Irrigated, If yes - list method & amount	Current Crop (for 20_____)						Previous Crop (for 20_____)					
						Current Crop Grown	¹ Yield - Proven or County Ave.	Type of Fertilizer / Manure	Timing & Method of Application	Total (Ave.) lb/Acre Applied		Previous Crop Grown	¹ Yield - Proven or County Ave.	Type of Fertilizer / Manure	Timing & Method of Application	Total (Ave.) lb/Acre Applied	
										Nitrogen (N)	Phosphorus (P ₂ O ₅)					Nitrogen (N)	Phosphorus (P ₂ O ₅)
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												
			<input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Easement		<input type="checkbox"/> No <input type="checkbox"/> Yes												

➡¹Yield (Columns 8 & 14) –
☐ YES, client has proven yields / certified crop insurance records for last 5 years. Obtain copy certification (i.e. crop insurance records).
☐ NO, client does not have proven yields / certified crop insurance records. Use County averages for Nutrient Management Plan.

Table 2 - Tillage Inventory - For each crop in the rotation indicate the number of passes for each operation.
Use additional sheets if needed.

List current crop in rotation (for year ____):				
List previous years crop (for year ____):				
Field Operation	# of Passes	# of Passes	# of Passes	# of Passes
NOTES:				
Bale crop or crop residue				
Graze stubble or residue				
Shredder, flail or rotary				
Rotary Stalk Chopper				
Row Stalk Chopper on ridges				
Stalk Slicer				
Plow, moldboard				
Subsoiler				
Sweep plow 20-40 inches wide				
Sweep plow >40 inches wide w/ mulch treader				
Chisel, straight point or twisted shovel				
Chisel, low crown sweep, 3 to 4 inches deep				
Disk, primary operation (1 st pass only)				
Disk, secondary operation				
Field Cultivator				
Rotary Harrow (Seedbed Conditioner)				
Seedbed Finisher (disk, field cultivator, coil tine harrow)				
Fertilizer Application- Anhydrous, 12 inch				
Fertilizer Application- Anhydrous injector, 30 inch				
Fertilizer Application – strip till				
Manure Application – Injection / Knife				
Manure Application – Surface, no incorporation				
Manure Application – Surface, incorporate (with disk, field cultivate, or harrow) within 24 hours				
Manure Application – Surface, incorporate (with disk, field cultivate, or harrow) within 48 hours				
Drill or air seeder tee slot openers 7-10 in. spacing				
Drill or airseeder, single disk openers				
Drill or airseeder, double disk openers				
Planter, double disk openers				
Planter, ridge till, strip till, or double disk openers with residue managers				
Row Cultivation				
Row Cultivation, –ridging, ditching, or hilling				
Other Option, please specify -				
Other Option, please specify -				

NOTE: The information provided on these pages will be used to determine the Soil Tillage Intensity Rating (STIR), Soil Conditioning Index (SCI), and Soil Loss for these fields.

C. Other Land Application Site & Nutrient Management Information

- 1) ☐ Yes or ☐ No - Are any fields utilized by another Animal Feeding Operations (AFOs) for manure application?
 - a) If YES, list the name of AFOs and its location(s) & identify the application site that is shared on aerial photo(s). Attach the aerial photo.
- 2) ☐ Yes or ☐ No - Soil testing conducted in last 5 years?
 - a) If YES, attach copy of reports
 - b) If YES, has manure been applied to that site since the soil test was conducted? ☐ No ☐ Yes
 - c) If NO soil tests are available, the client is not required to conduct soil testing in order for CNMP development. Use estimated N & P₂O₅ values based on crop history & past fertilizer/manure applications rates. Note: The NMP can be adjusted as needed upon completion of soil testing.
- 3) ☐ Yes or ☐ No - Is a manure analysis available? (Indicate date of test: _____)
 - a) If YES, attach copies of analysis
- 4) ☐ Yes or ☐ No - Does the client calibrate the application equipment?
- 5) ☐ Yes or ☐ No - Does client use a crop consultant?
 - a) If YES, please list Name/Company: _____
- 6) ☐ Yes or ☐ No - Are any of the application sites in NRD Phase II areas?
 - a) If YES, obtain legal description of site or indicate on application maps.
- 7) ☐ Yes or ☐ No - Does the client test the irrigation water?
 - a) If YES, attach copies of analysis

D. Manure Sold or Transferred (Given Away)

Date	Name of Recipient	Recipient's Address (town)	Amount of Manure (gal. or T)	
			Sold	Transferred
<i>Example: 10/2/05</i>	<i>Charles Smith</i>	<i>Wahoo</i>	<i>20,000 tons</i>	

SECTION 5 - Manure Transfer & Waste Application Equipment Inventory

A. Manure Application Equipment Inventory

Type/Model	Possession of Equipment			Size / Capacity	Ave. Application Rate – Complete one from below		Type of Manure	Waste Storage Facility
	Own	Rent / Custom	Needs		T/ac or Gal/ac	# Loads / Acre or Field		
<i>Example: WP Spread-All</i>	<i>1</i>				<i>18 Tons</i>	<i>30 T/ac</i>	<i>Solids</i>	<i>Pens & debris basins 1 & 2</i>

B. Irrigation Equipment Inventory

Type/Model	Possession of Equipment			Size / Capacity	Ave. Application Rate (ac-in/ac)	Type of Runoff or Manure / Waste Water	Storage Facility from which Manure originated
	Own	Rent / Custom	Needs				
<i>Example: Pump & Pivot</i>			<i>1</i>	<i>800 gal/min</i>	<i>4 ac-in/ac/yr</i>	<i>High Pressure Volume Guns at Each Tower</i>	<i>Holding Ponds 1 & 2</i>

C. *Manure Transfer Equipment Inventory

Type/Model	Possession of Equipment			Size / Capacity
	Own	Rent / Custom	Needs	
<i>Example: Loader</i>	<i>X</i>			<i>3 Yards³</i>

*Manure transfer equipment includes, but is not limited to conveyance system using structures, conduits, or equipment. The system is designed to transfer animal manure & waste water through a hopper, reception pit, a pump, a conduit, or hauling equipment.

SECTION 6 – Other Information (as applicable)

A. Feed Management

1) ☐ Yes or ☐ No - Attach copy of feed ration sheets.

2) Complete only For Cattle Operations:

a) What is the type of diet? ☐ High Energy ☐ High Forage

b) Do you feed any of the following? If YES, indicate the percent fed in the diet.

☐ Yes; _____ % Wet Milling Corn - Wet Corn Gluten Feed or Steep Liquor

☐ Yes; _____ % Drying Milling Corn Wet Distillers Grain plus Solubles (WDGS), Dry Distillers Grain plus Solubles (DDGS), or Corn Syrup (Distillers Soluble)

☐ Yes; _____ % Other (i.e. sorghum) - please list _____

3) For Swine Operations, do you feed a ☐ wet/dry or ☐ dry diet?

4) For Swine or Poultry Operations, do you use phytase as a feed additive? ☐ Yes or ☐ No

B. Other Waste Treatment or Utilization Options

- 1) Does the Client stockpile manure ☐ onsite or ☐ offsite (i.e. fields)? List the location of fields.
- a. If manure, bedding, etc. is stockpiled, how often are the piles removed for land application?

- b. If manure is stockpiled onsite, is the runoff from the stockpile contained or diverted into the waste storage facility? ☐ Yes or ☐ No
- 2) Does the Client utilize any additional waste treatment options or are they interested in any other waste treatment methods?
- ☐ Compost - If marked, see next two questions.
☐ Methane Capture/Digestion
☐ Other - Explain: _____
- 3) If the manure is composted, is the runoff from the compost piles collected / diverted in the waste storage structure? ☐ Yes or ☐ No
- 4) If the Client composts any of the manure, explain what happens with the composted product:
- ☐ Reused for bedding (example - dairy)
☐ Utilized on application sites listed within this Inventory Job Sheet
☐ Given / Sold to farmers
☐ Given / Sold to greenhouse or general public
☐ Other – Explain: _____
- 5) If the Client composts, does he mix the manure with any grass clippings/leaves, etc.? ☐ Yes or ☐ No

C. Other Pertinent Information

NRCS Staff –

After Completion of this Inventory Sheet, Proceed to - Step B Evaluation of NMP, Manure Storage Facility Capacity, Manure Transfer & Land Treatment Using Appropriate Tools” in the CNMP Checklist / Guidance Document.